

# इंटरनेट

# मानक

## Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 12240-3 (1988): Methods of test for polyvinyl chloride boots, Part 3: Determination of relative density [CHD 19: Footwear]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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*Indian Standard***METHODS OF TEST FOR POLYVINYL CHLORIDE BOOTS****PART 3 DETERMINATION OF RELATIVE DENSITY**

**1. Scope** — This standard ( Part 3 ) prescribes the test procedure for determination of the relative density of components for polyvinyl chloride boots.

**2. Apparatus**

**2.1 Balance** — Weighing to 1 mg.

**2.2 Balance Straddle** — A pan straddle of convenient size to support the beaker and permit determination of the mass of the test piece in water.

**2.3 Beaker** — 250-ml capacity or smaller if necessary depending on the design of the balance.

**2.4 Copper Wire** — Approximately 0.1 mm in diameter.

**3. Test Method**

**3.1 Preparation and Conditioning of Test Piece** — The test piece shall have a surface, free from crevices as far as possible, weighing around 5 g. The test piece shall then be conditioned to a moisture equilibrium in an atmosphere of  $65 \pm 5$  percent relative humidity and temperature  $27 \pm 2^\circ\text{C}$  [ see IS : 196-1966 'Atmospheric condition for testing ( revised )' ] for 24 hours prior to testing.

**4. Procedure**

**4.1** Suspend the test piece from the hook on one side of the balance using a suitable length of wire, so that the bottom of the test piece does not touch the bottom of the beaker and then weigh. Counter balance the wire previously by a length of the wire on the other pan. Repeat the weighing with the test piece completely immersed in the freshly boiled and cooled distilled water to a temperature of  $27 \pm 2^\circ\text{C}$ , in a beaker. Allow sufficient time for the test piece to attain the temperature of the water. Make sure that there are no air bubbles on the surface of the specimen and the wire while immersed in water.

**5. Calculation**

**5.1** Calculate the relative density as follows:

$$\text{Relative density ( } 27/27^\circ\text{C )} = \frac{M_1}{M_1 - M_2}$$

where,

$M_1$  = mass in g of test piece in air, and

$M_2$  = mass in g of test piece in water.

**EXPLANATORY NOTE**

This standard has been published in various parts as follows:

IS : 12240 Methods of test for polyvinyl chloride boots:

Part 1 Measurement of thickness;

Part 2 Determination of durometer hardness, Shore A;

Part 3 Determination of relative density;

Part 4 Determination of volatility;

Part 5 Determination of lead content;

Part 6 Determination of tensile strength and elongation at break;

Part 7 Flexing test resistance to cut growth for soling material; and

Part 8 Resistance to flexing for polyvinyl chloride upper material.